

DAILY CURRENT AFFAIRS

By



SOURCES



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Important News Articles

1. Volcano in Iceland erupts after being preceded by thousands of earthquakes - The Hindu
2. GST regime brought down prices, says Nirmala as RS returns two taxation Bills - The Hindu/ House nod to raise age limit for GST Appellate Tribunals President, members - Indian Express
3. 'Objective of aligning inflation with 4% target far from assured' - Indian Express
4. Disinflation may pave way for interest rate cut: RBI officials - The Hindu
5. What are solid-fuel missiles, and why is North Korea developing them?- Reuters
6. Indian Air Force successfully testfires 'SAMAR' air defence missile system at Exercise Astrashakti- Economic times
7. National Culture Fund (NCF) Received Rs. 3.70 Crore from Non-Government Sources During Last Five Years- PIB
8. In big AI push, Centre to step up compute capacity, offer free services to startups - Indian Express

Editorials, Gists and Explainers

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3. Outcomes of the COP-28 climate summit - The Hindu

Quick Look

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2. Cholera
3. Lumpy Skin Disease (LSD)
4. Mithila
5. Janakpuri
6. Mullaperiyar Dam
7. Andriamamelolo Cave

Important News Articles

GS I

1. Volcano in Iceland erupts after being preceded by thousands of earthquakes - The Hindu

Relevance: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone. etc., geographical features and their location-changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

News:

- A **volcano erupted in southwestern Iceland**, spewing semi-molten rock into the air in a spectacular show of Earth's power in the land known for fire and ice.

Prelims Takeaway

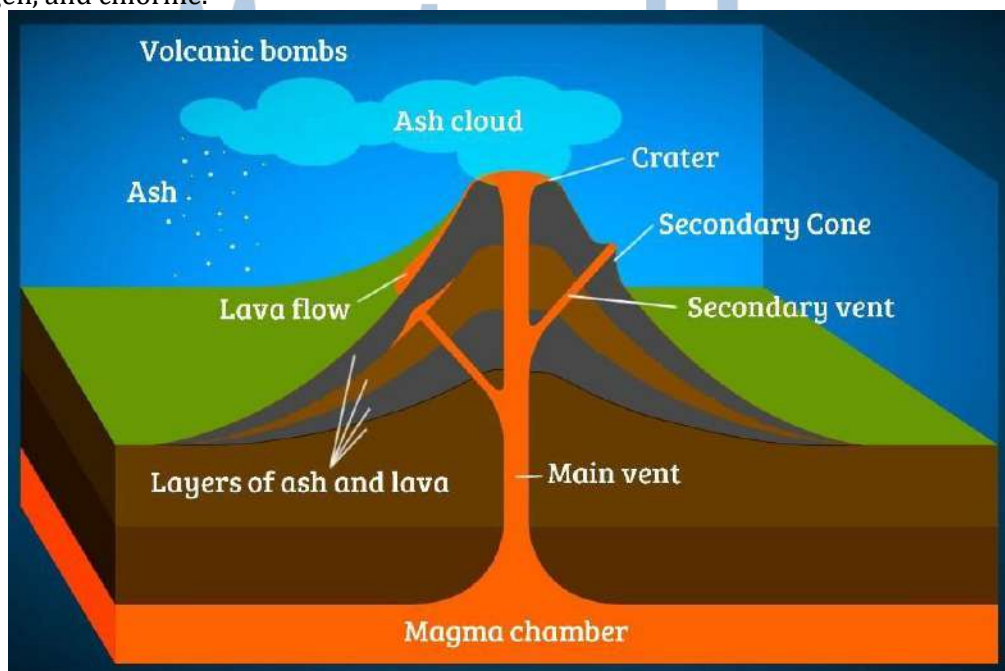
- Iceland
- Arctic Circle

Key Points

- **Iceland**, which sits just **below the Arctic Circle** and above a volcanic hotspot in the **North Atlantic**
- Eruption in Iceland averages an eruption **every four to five years**.
- The most disruptive in recent times was the 2010 eruption of the **Eyjafjallajokull volcano**, which spewed huge clouds of ash into the atmosphere
- It led to widespread airspace closures over Europe.
- The current eruption is **not expected to release ash** into the air because **it does not lie under water or ice**.
- A volcanic range on the Reykjanes Peninsula, about 50 kilometers (31 miles) southwest of the capital
- Reykjavik has **erupted three times since 2021**, after being dormant for 800 years.

Volcanoes

- A volcano is a **vent or fissure in Earth's crust** through which lava, ash, rocks, and gases erupt.
- An **active volcano** is a volcano that has **erupted in the recent past**.
- The mantle contains a weaker zone known as the asthenosphere and **magma** is the material present in the **asthenosphere**.
- Material that flows to or reaches the ground comprises lava flows, volcanic bombs, pyroclastic debris, dust, ash, and gases.
- The gases may be **sulphur compounds, nitrogen compounds**, and trace amounts of argon, hydrogen, and chlorine.



GS II

2. GST regime brought down prices, says Nirmala as RS returns two taxation Bills - The Hindu/ House nod to raise age limit for GST Appellate Tribunals President, members - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- The Rajya Sabha recently returned the **Central GST (Second Amendment) Bill, 2023**.
- It proposes an **increase in the age limit** for the President and members of the Goods and Services Tax (GST) Appellate Tribunals.
- The Rajya Sabha also returned the **Provisional Collection of Taxes Bill, 2023**, replacing the outdated **Provisional Collection of Taxes Act, 1931**.
- It seeks to **address customs or excise duties**, with or without changes in tariff classification.

Prelims Takeaway

- Provisional Collection of Taxes Bill, 2023
- Central GST (Second Amendment) Bill, 2023
- Goods and Services Tax (GST) Appellate Tribunals

Background

- The Finance Minister highlighted that the formation of GST Appellate Tribunals **faced legal challenges**, leading to amendments.
- However, the CJI pointed out that these **amendments** did not conform to the **age limits** set by the **Tribunals Reforms Act**, necessitating the current Bill.

Key Changes Proposed

- Increase in the age limit for the **President** of GST Appellate Tribunals from 67 to **70 years**.
- Increase in the age limit for **members** of GST Appellate Tribunals from 65 to **67 years**.
- The adjustment aims to **align the age limits** with those specified in the **Tribunals Reforms Act, 2021**.
- The Bill also permits individuals with a **decade of legal experience** to be considered as **judicial members** of the tribunals, aiming to diversify the expertise pool.

Support and Concerns

- Establishing tribunals could **alleviate the burden on High Courts**, which currently face a significant backlog of approximately 15,000 appeals.
- Considering **chartered accountants**, in addition to lawyers, for **tribunal memberships** has been suggested.
- The Finance Minister acknowledged the **challenges in filling tribunal vacancies**, especially those requiring technical expertise or retired judicial officers.

GS III

3. 'Objective of aligning inflation with 4% target far from assured' - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- Recently, an article published in the Reserve Bank of India's (RBI) monthly bulletin observed that **If inflation is not brought back to the 4 per cent target** there are chances that the **growth may get affected**

Prelims Takeaway

- Consumer Price Index
- Wholesale Price Index

Key highlights of report

- Consumer price index (CPI) -based inflation for FY24 is expected to be at **5.4 per cent**

- On a real-time basis, **inflation is hurting discretionary consumer spending** and this, in turn, is holding back topline growth of manufacturing companies as well as their capex, it had said.
- On economy, despite significant global headwinds, the **Indian economy remained the fastest growing** major economy in 2023.
- The RBI, in its monetary policy, **revised the real GDP projection** for FY24 to 7 per cent from 6.5 per cent earlier.

Wholesale Price Index

- It measures the changes in the **prices of goods sold and traded** in bulk by wholesale businesses to other businesses.
- It is published by the **Office of Economic Adviser, Ministry of Commerce and Industry**.
- The base year of All-India WPI has been **revised from 2004-05 to 2011-12 in 2017**.

Consumer Price Index

- It measures price changes from the **perspective of a retail buyer**.
- It is released by the National Statistical Office (NSO).
- The CPI calculates the **difference in the price of commodities and services** such as food, medical care, education, electronics etc, which Indian consumers buy for use.

4. Disinflation may pave way for interest rate cut: RBI officials - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

Prelims Takeaway

- Disinflation
- Inflation
- Economic Activity Index

Rate cycle turning

RBI officials believe a slowdown in global growth and easing inflation will cause central banks to cut interest rates

- Officials say that despite global headwinds, India remained the fastest growing major economy in 2023
- India's domestic financial markets had been boosted by the abiding strength of the real economy, they add
- RBI's economic activity index (EAI) now forecasts GDP growth for the third quarter of 2023-24 at 6.7%



5. What are solid-fuel missiles, and why is North Korea developing them?- Reuters

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

News:

- **North Korea test-fired** an intercontinental ballistic missile (ICBM) powered by solid fuel

Prelims Takeaway

- Liquid Fuel Missiles
- Solid Fuel Missiles

Solid-fuel missiles

- Solid-fuel missiles **do not need to be fuelled immediately** ahead of launch.
- They are often easier and safer to operate, and **require less logistical support**.
- They are **harder to detect and more survivable** than liquid-fuel weapons.
- Solid propellants are a **mixture of fuel and oxidiser**.

- **Metallic powders** such as aluminium often serve as the fuel, and ammonium perchlorate, which is the salt of perchloric acid and ammonia, is the most common oxidiser.
- **The fuel and oxidiser are bound together** by a hard rubbery material and packed into a metal casing.

Solid Fuel VS Liquid Fuel Missiles

- Liquid propellants provide greater propulsive thrust and power, but **require more complex technology and extra weight**.
- **Solid fuel is dense and burns** quite quickly, generating thrust over a short time.
- **Solid fuel can remain in storage** for an extended period without degrading or breaking down - a common issue with liquid fuel.

6. Indian Air Force successfully testfires 'SAMAR' air defence missile system at Exercise Astrashakti- Economic times

Relevance: Various Security forces and agencies and their mandate.

News:

- In a major success for its in-house design and development efforts, the Indian Air Force has successfully **test fired its SAMAR air defence missile system**

Prelims Takeaway

- AstraShakti-2023
- SAMAR Air Defence Missile System

SAMAR Air Defence Missile System

- Indian Air Force developed SAMAR air defence missile system **during exercise AstraShakti-2023** at Air Force Station Suryalanka held recently
- Surface to Air Missile for Assured Retaliation (SAMAR) is a **short-range air-defence system**.
- It has been developed by a unit under the **IAF's Maintenance Command**.
- The system is credited with a maximum range of 10–12 km and is **used against low-flying aerial targets**.
- It can engage aerial threats with missiles operating at a **speed range of 2 to 2.5 Mach**.
- The SAMAR-1 system uses the IAF's existing inventory of shelf-life-expired Russian Vympel R-73E infrared-guided air-to-air missiles (AAMs) for the **surface-to-air role**.
- Missile launcher had an **electro-optic system visible**.

AstraShakti-2023

- It is an air force exercise that is held at **Suryalanka Air Force Station in Andhra Pradesh**.
- **Objective:**
- To serve as a platform to **showcase the advanced capabilities of indigenous weapon** systems.
- To underscore India's commitment to exporting its home-grown weapon systems to the global market.

7. National Culture Fund (NCF) Received Rs. 3.70 Crore From Non-Government Sources During Last Five Years- PIB

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

News:

- Recently, the Union Minister for Culture, Tourism And Development informed in the Lok Sabha that the **National Culture Fund (NCF) received Rs. 3.70 Crore From Non-Government Sources** during the last five Years.

Prelims Takeaway

- Charitable Endowment Act, 1890
- National Culture Fund

National Culture Fund

- It was set up by the Government of India as a **Trust under the Charitable Endowment Act, 1890** through a Gazette Notification in 1996.
- It was established as a **funding mechanism and it is different from** the existing sources and patterns of funding for the arts and culture in India.
- It will enable institutions and individuals **to support arts and culture directly as partners** with its government.

Objective:

- It aims to **mobilise extra resources** through Public-Private Partnership (**PPP**) towards promoting, protecting & preserving India's Cultural Heritage.

Composition:

- It is managed and administered by a **Council and an Executive Committee to actualize those policies.**
- The Council is **chaired by the Union Minister of Culture** and has a maximum strength of 24 including both the Chairman and Member Secretary.
 - The purpose for this structure is to **increase non-government representation** in the decision-making process.
 - The donations to the national Culture Fund will be **eligible for tax benefit under the Income Tax Act.**

8. In big AI push, Centre to step up compute capacity, offer free services to startups - Indian Express

Relevance: Science and Technology- developments and their applications and effects in everyday life.

News:

- The Indian government is embarking on an **Artificial Intelligence (AI) Mission** to develop its own '**sovereign AI.**'
- **Objective:** To enhance computational capacity in India and provide compute-as-a-service to Indian startups.
- The government envisions AI as a **crucial economic driver** and plans to leverage the impending AI boom for **economic growth.**

Prelims Takeaway

- Sovereign AI
- Compute Capacity Building
- Public-Private Partnership Model
- National Data Governance Framework Policy

Compute Capacity Building

- The government intends to **build computational capacity** through both government initiatives and public-private partnerships.
- India aims to build a compute capacity
 - Between 10,000 and 30,000 GPUs (graphic processing units) under the PPP model
 - An additional 1,000-2,000 GPUs through the PSU Centre for Development of Advanced Computing (C-DAC)
- The government is **exploring incentive structures** to encourage private companies to set up computing centres in the country.
 - These include capital expenditure subsidies, operational expense incentives and usage fees.

Public-Private Partnership Model

- **Objective:** To create a digital public infrastructure (DPI) from the GPU assembly.
- This will allow startups to **utilize computational capacity** at a **lower cost** without investing in GPUs, a significant expense for AI operations.
- In addition, the government also aims to make **datasets available to Indian startups.**
- A draft **National Data Governance Framework Policy** proposes the creation of an **India Datasets platform.**
 - It makes non-personal and anonymized datasets accessible to startups and researchers.
- The government is considering directives for big tech companies to **share anonymized personal data** with the India Datasets platform.

Editorials, Gists and Explainers

1. India's defence budgeting and the point of deterrence - The Hindu

Relevance: Defence

Context:

- The **Medium Multi-Role Combat Aircraft (MMRCA) program** faces challenges as the Indian Air Force (IAF) struggles with **depleting squadron strength**.
- With elections approaching and potential **impacts on the defence budget**, there are concerns about maintaining **India's deterrence** posture.

IAF's Procurement Challenges	Role of Indigenous Development
<ul style="list-style-type: none"> • The drawbacks of the Rafale jet purchase (36 jets instead of the required 126), have resulted in a substantial reduction in the IAF squadron strength to an abysmal 32. • The focus lies on the importance of a prudent evaluation to determine whether defence budget allocations should be guided by the principle of 'affordable defence' or 'affordable effectiveness.' <p style="text-align: center;">Northern Border Threat</p> <ul style="list-style-type: none"> • Given the live threat on the northern borders, it is important to prepare for potential conflicts. • This calls for a careful evaluation of India's war strategy especially amid electoral considerations. <p style="text-align: center;">Modernization Across Services</p> <ul style="list-style-type: none"> • The need for modernization extends to all branches of the military, including <ul style="list-style-type: none"> ◦ sea power to deter China ◦ the modernization of the Army ◦ the budget requirements for the large-sized Army • The planning and budgeting approach have shifted from a short sharp conflict to preparing for an extended war scenario. 	<ul style="list-style-type: none"> • While advocating the Atmanirbhar Bharat drive for self-reliance, there is a strong emphasis on striking a balance between imports and indigenous development to facilitate technological modernization within the armed forces. • Concerns are raised about the stagnant defence budget underscoring the need for increased research and development expenditure. • There has been a decrease in the defence expenditure as a percentage of the central government's total expenditure. <ul style="list-style-type: none"> ◦ From around 16.4% in 2012-13 to 13.3% in 2022-23. • This trend underscores the budgetary deficit in capital acquisitions for the Ministry of Defence. <ul style="list-style-type: none"> ◦ The Ministry of Defence had asked for ₹1,76,346 crore in 2023-24 for capital acquisitions. ◦ However, only ₹1,62,600 crore was allotted, creating a deficit of ₹13,746 crore. • The Global Innovation Index 2022 pegs India's research and development expenditure at just 0.7% of its GDP which places it 53rd globally. <ul style="list-style-type: none"> ◦ China, incidentally, spent \$421 billion in 2022, which is 2.54% of its GDP. • It reveals India's lower R&D expenditure compared to China, emphasizing the importance of sustained momentum in policy-making and budgeting. <p style="text-align: center;">Emphasis on Indigenization</p> <ul style="list-style-type: none"> • The government's emphasis on indigenization through initiatives like Innovations For Defence Excellence (iDEX) and service-specific projects is acknowledged. • However, the long gestation period for such initiatives, calls for consistent momentum and bipartisan statesmanship in both policy-making and budgeting.

Conclusion

- The **national security imperatives** should **not be compromised** for electoral imperatives.
- Undermining **defence budget priorities** in the face of potential threats could be **detrimental**.
- Examples of other nations **increasing** their defence budgets **in response to China's actions** serve as a cautionary reference.

2. What causes inflation in India: Demand or supply issues? - The Hindu

Relevance: Economy

Context:

- According to a Reserve Bank of India (RBI), inflation in India is influenced by a combination of **supply and demand factors**.
- During the two waves of **COVID-19**, **supply disruptions** were the main cause of inflation.
- However, following the **Russia-Ukraine conflict**, the driving forces shifted predominantly to factors related to **demand**.

Influence of COVID-19 and the Russia-Ukraine conflict

- During the initial phases of the pandemic, lockdowns led to a decline in production and demand, causing a drop in economic growth and commodity prices.
- However, as the economy reopened with vaccination efforts, demand outpaced supply, leading to upward pressure on commodity prices.
- The onset of the Russia-Ukraine conflict further intensified supply chain challenges and added to commodity price pressures.

Methodology to Identify Factors

- The Centre for Monitoring Indian Economy's consumer expenditure data has been used to categorize inflation as either demand-driven or supply-driven.
- A simultaneous shift in prices and quantities in the same direction indicates demand-driven inflation, while opposing movements suggest supply-driven factors.

Key Findings

- Categories with Supply-Side Constraints: Vegetables, oils and fats, milk, eggs, pulses, and sugar.
- Demand-Sensitive Categories: Non-alcoholic beverages, personal care products, and health-related goods.

Overall Inflation Trends

- Demand and supply factors at the sub-group level were combined using the CPI weights to assess overall headline inflation.
- Supply-Focused Periods
 - Supply factors drove inflation during excess rainfall in October 2019-January 2020, various stages of pandemic and the onset of the Russia-Ukraine conflict.
 - They contributed approximately 55% to Consumer Price Index (CPI) headline inflation from January 2019 to May 2023.
- Demand Impact during COVID-19
 - The impact of demand-side factors on headline inflation decreased during the COVID-19 crisis, dropping to 27.1% in 2020 from 41.5% in 2019.
 - However, demand-side factors intermittently increased post-COVID-19 waves and after the Russia-Ukraine conflict.
 - This contributed to the peak in headline inflation in April 2022.
 - Overall Demand Contribution: Over the period from January 2019 to May 2023, demand drivers contributed 31% to inflation.

3. Outcomes of the COP-28 climate summit - The Hindu

Relevance: Conservation, environmental pollution and degradation

Context:

- The recently concluded COP-28 focused on **addressing the global climate crisis**, covering various aspects.
- These include loss and damage fund, global stocktake, green finance etc.

Loss and Damage Fund

- The Loss and Damage (L&D) fund, operationalized at COP-28, received only \$790 million in pledges.
- This falls significantly short of the required \$100 billion to \$400 billion per year.
- Concerns were raised about the World Bank overseeing the fund, including
 - issues of legal autonomy, decision-making authority, and the fund's responsiveness to emergencies.
- Calls were made for affected communities to directly access funding, preferably in the form of grants.

Global Stocktake (GST)

- COP-28 witnessed the first Global Stocktake (GST), evaluating progress toward the goals of the Paris Agreement.
- Countries pledged to transition away from fossil fuels and triple renewable energy capacity by 2030.
- However, the transition is limited to energy systems, allowing continued use of fossil fuels in other sectors.
- The declaration also refers to 'transitional fuels', such as natural gas, for ensuring energy security, raising concerns about a true transition.

Green Finance

- The financial segment of the GST implementation framework emphasized developed nations' responsibility in climate finance.
- The Green Climate Fund received \$3.5 billion in fresh support, and the Adaptation Fund received an additional \$188 million.
- New partnerships were formed to mobilise investments in renewable energy, sustainable agriculture and infrastructure.
- However, available funds still fall short of the estimated \$194-366 billion annual funding requirement for adaptation.

India's Performance

- India did not sign the UAE declaration on climate and health.
- It cites concerns about compromising healthcare infrastructure growth due to emissions reduction commitments.
- India did not join the Global Methane Pledge as it shifts focus from carbon dioxide to methane, a GHG with a lower lifetime.
- Also, India's emissions primarily come from rice cultivation and livestock rearing.

COP 28 Takeaways

- COP-28 outcomes included historic firsts, such as
 - the climate and health declaration
 - the acknowledgement of nature-based solutions for biodiversity and climate
- Challenges and differences between developed and developing countries remain.
 - These include issues of fossil-fuel subsidies, market mechanisms, financial resource allocation, and private sector engagement in climate action.
- The commitment to ramp up renewable energy targets was noted as a significant step forward.
- However, concerns linger regarding loss and damage metrics, fund management, risky technologies, fossil fuel use and natural gas as a transitional fuel.

Quick Look

1. Greenwashing

- The term greenwashing was first used in 1986 by Jay Westerveld, an American environmentalist and researcher.
- Greenwashing is a deceptive practice where companies or even governments exaggerate their actions and their impact on mitigating climate change, often providing misleading information or making unverifiable claims.
- It is an attempt to capitalise on the growing demand for environmentally sound products.
- It is fairly widespread, and entities often label various activities as climate-friendly without verifiable evidence, undermining genuine efforts against climate change.
- Example: The Volkswagen scandal where the German car company was found to have been cheating in emissions testing of its supposedly green diesel vehicles.

2. Cholera

- It is an acute diarrhoeal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae*.
- It remains a global threat to public health and an indicator of inequity and lack of social development.
- Symptoms
 - It is an extremely virulent disease that can cause severe acute watery diarrhoea.
 - Profuse watery diarrhoea, vomiting, leg cramps etc.
- The disease can spread rapidly in areas with inadequate sewage and drinking water treatment.
- Currently, there are three WHO pre-qualified oral cholera vaccines (OCV), Dukoral, Shanchol and Euvichol-Plus.
- All three vaccines require two doses for full protection.

3. Lumpy Skin Disease (LSD)

- LSD is caused by the lumpy skin disease virus (LSDV) of the capripoxvirus genus in the poxviridae family.
- The LSDV mainly affects cattle - cow and its progeny, and the Asian water buffaloes.
- Transmission
 - Through blood-sucking vectors like ticks and mites like houseflies, mosquitoes, etc.
 - It also spreads through contaminated water, fodder and feed.
 - The free-ranging cattle could also be a reason for the rapid spread of LSD.
- Symptoms
 - LSDV attacks the circulatory system of an animal and causes inflammation of blood vessels and lesions in various organs like liver, lungs, spleen, lymph nodes etc.
 - In turn, it causes epidermis, making the outer surface of the skin to get separated from dermis - the inner layer of the skin.
 - This, in turn, leads to formation of lumps or nodules on an animal's body.
 - Fever, increased mucus secretion, loss of appetite etc are among other symptoms.

4. Mithila

- In the Vishnu Puran, Mithila is described as a place to the north of Ganga and south of Himalayas.
- Abul Fazl in Ain-e-Akbari clearly mentions Mithila as one of the parganas (administrative divisions), earmarking its location and spread
- It includes the present-day Darbhanga, Madhubani, Sitamarhi, Supaul, Saharsa, Madhepura and some adjoining areas of Bihar and Nepal.
- Mithila has also been called Mahla, and finds mention in the revenue records of the erstwhile Sanyukt Prant (United Provinces) of Bihar, Bengal and Orissa.

5. Janakpuri

- It is a relatively modern name for Mithilapuri, which is mentioned in Valmiki Ramayan.
- Our government, in coordination with the Nepal government, has made Janakpuri a part of the Ramayana Circuit.
- Janakpur became a part of Nepal after the 1816 Indo-Nepal treaty.
- Even the leading historian on Nepal, Fancis Buchanan Hamilton, has not written anything about 'Janakpuri'. What we have is a mention of Mithilapuri.

6. Mullaperiyar Dam

- It is a masonry gravity dam situated on the Periyar River in Thekkady, Idukki district, in Kerala.
- It is located 881 m above sea level, on the Cardamom Hills of the Western Ghats.
- The dam is built at the confluence of the Mullayar and Periyar rivers.
- Its construction began in 1887 and was completed in 1895.
- The construction was carried out by the British Corps of Royal Engineers under the leadership of Pennycuik.
- The dam was constructed with limestone and "Surkhi" (burnt brick powder and a mixture of sugar and calcium oxide).
- The dam's purpose was to divert the waters of the west-flowing River Periyar eastward to the arid rain shadow regions of the Theni, Madurai, Sivaganga, and Ramanathapuram districts of Tamil Nadu.

7. Andriamanelo Cave

- It is situated in the western Madagascar.
- It is located in karstified limestone of the Paysage Harmonieux Protege de Beanka.
- In this cave truly pictorial art, depicting images of nature with human-like and animal-like figures have been discovered.
- The dramatic discoveries contained several surprises, including hints at some remarkable cultural connections.
- First, scenes depicted in some cases linked up fairly directly to Egyptian religious motifs from the Ptolemaic period (300-30 BCE).

Prelims Track Question

Q1. Consider the following statements regarding the Arctic Circle

1. The Arctic Circle is an imaginary circle of latitude, the southernmost point at which the sun remains above the horizon for 24 continuous hours during the summer solstice.
2. The Arctic Circle is characterised by the phenomenon of the Midnight Sun during the summer solstice.
3. The Arctic Circle is home to the North Magnetic Pole.

How many of the statements given above is/are incorrect?

- A. Only one
- B. Only two
- C. All three
- D. None

Q2. Consider the following statements about Wholesale Price Index

1. It measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses.
2. It is published by the Office of Economic Adviser, Ministry of Commerce and Industry.
3. The base year of All-India WPI has been revised from 2004-05 to 2011-12 in 2017.

How many of the statements given above is/are correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Q3. Consider the following statements

1. Deflation refers to a decrease in the rate of inflation, which means that prices are still rising but at a slower pace than before.
2. Disinflation is a sustained decrease in the general price level of goods and services.

Which of the statements given above is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Q4. Consider the following statements about Solid-fuel missiles

1. Solid-fuel missiles do not need to be fuelled immediately ahead of launch.
2. They are often easier and safer to operate, and require less logistical support.
3. Solid fuel can remain in storage for an extended period without degrading or breaking down - a common issue with liquid fuel.

How many of the statements given above is/are incorrect?

- A. Only one
- B. Only two
- C. All three
- D. None

Q5. Consider the following statements about SAMAR Air Defence Missile System

1. Indian Air Force developed SAMAR air defence missile system during exercise AstraShakti-2023 at Air Force Station Suryalanka held recently
2. Surface to Air Missile for Assured Retaliation (SAMAR) is a long-range air-defence system.
3. It can engage aerial threats with missiles operating at a speed range of 2 to 2.5 Mach.

How many of the statements given above is/are correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Q6. Consider the following statements about National Culture Fund

1. It was set up by the Government of India as a Trust under the Charitable Endowment Act, 1890 through a Gazette Notification in 1996.
2. It was established as a funding mechanism and it is different from the existing sources and patterns of funding for the arts and culture in India.
3. The Council is chaired by the Union Minister of Culture

How many of the statements given above is/are correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Q7. Consider the following statements regarding India's Artificial Intelligence Mission

1. The AI Mission aims to develop 'sovereign AI' in India and plans to offer compute-as-a-service to the country's startups.
2. The government intends to build computational capacity through public-private partnerships only.
3. The government plans to create a digital public infrastructure (DPI) to provide startups with access to computational capacity at a lower cost.

How many of the statements given above is/are incorrect?

- A. Only one
- B. Only two
- C. All three
- D. None

Q8. Consider the following statements

1. The Positive Indigenisation List consists of items that can only be procured by the Indian armed forces from domestic manufacturers.
2. According to the Global Innovation Index, 2022, India's research and development expenditure is just 2% of its GDP.

Which of the statements given above is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Q9. Consider the following

1. Increase in Government Expenditure
2. Inflation Indexing Wages
3. Rising Interest Rates
4. Growth in Population

How many of the above mentioned factors lead to demand pull inflation?

- A. Only one
- B. Only two
- C. Only three
- D. All four

Q10. Consider the following with reference to COP 28

1. It witnessed the first Global Stocktake (GST), evaluating progress toward the goals of the Paris Agreement.
2. It referred to 'transitional fuels', such as natural gas, for ensuring energy security.
3. India signed the UAE declaration on climate and health and the Global Methane Pledge.

How many of the statements given above is/are correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Prelims Track Answer

Ans. 1 Option A is correct

Explanation

- The Arctic Circle is an imaginary circle of latitude approximately 66.5 degrees north of the equator, marking the southernmost point at which the sun remains above the horizon for 24 continuous hours during the summer solstice. **Hence, statement 1 is correct**
- The Arctic Circle is characterized by the phenomenon of the Midnight Sun during the summer solstice. **Hence, statement 2 is correct**
- Due to the tilt of the Earth's axis, during the summer solstice (around June 21st), the North Pole is tilted toward the sun.
- This results in the phenomenon of the Midnight Sun within the Arctic Circle, where the sun remains visible at midnight.
- The North Magnetic Pole is not fixed and is currently drifting over time. As of the last known information, it is located in the Arctic Ocean, moving towards Russia.
- It is not situated precisely within the Arctic Circle. **Hence, statement 3 is incorrect**

Ans. 2 Option C is correct

Explanation

- It measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses. **Hence, statement 1 is correct**
- It is published by the Office of Economic Adviser, Ministry of Commerce and Industry. **Hence, statement 2 is correct**
- The base year of All-India WPI has been revised from 2004-05 to 2011-12 in 2017. **Hence, statement 3 is correct.**

Ans. 3 Option D is correct

Explanation

- Disinflation refers to a decrease in the rate of inflation, which means that prices are still rising but at a slower pace than before. **Hence, statement 1 is incorrect.**
- It is important to note that disinflation is different from deflation, which refers to a

sustained decrease in the overall price level.

- Deflation occurs when the inflation rate falls below 0%, which is known as negative inflation. **Hence, statement 2 is incorrect.**

Ans. 4 Option D is correct

Explanation

- Solid-fuel missiles do not need to be fuelled immediately ahead of launch. **Hence, statement 1 is correct**
- They are often easier and safer to operate, and require less logistical support. **Hence, statement 2 is correct**
- They are harder to detect and more survivable than liquid-fuel weapons.
- Solid propellants are a mixture of fuel and oxidiser.
- Metallic powders such as aluminium often serve as the fuel, and ammonium perchlorate, which is the salt of perchloric acid and ammonia, is the most common oxidiser.
- The fuel and oxidiser are bound together by a hard rubbery material and packed into a metal casing.
- Solid Fuel VS Liquid Fuel Missiles
- Liquid propellants provide greater propulsive thrust and power, but require more complex technology and extra weight.
- Solid fuel is dense and burns quite quickly, generating thrust over a short time.
- Solid fuel can remain in storage for an extended period without degrading or breaking down - a common issue with liquid fuel. **Hence, statement 3 is correct**

Ans. 5 Option B is correct

Explanation

- Indian Air Force developed SAMAR air defence missile system during exercise AstraShakti-2023 at Air Force Station Suryalanka held recently **Hence, statement 1 is correct**
- Surface to Air Missile for Assured Retaliation (SAMAR) is a short-range air-

defence system. **Hence, statement 2 is incorrect**

- It has been developed by a unit under the IAF's Maintenance Command.
- The system is credited with a maximum range of 10–12 km and is used against low-flying aerial targets.
- It can engage aerial threats with missiles operating at a speed range of 2 to 2.5 Mach. **Hence, statement 3 is correct**

Ans. 6 Option C is correct

Explanation

- It was set up by the Government of India as a Trust under the Charitable Endowment Act, 1890 through a Gazette Notification in 1996. **Hence, statement 1 is correct**
- It was established as a funding mechanism and it is different from the existing sources and patterns of funding for the arts and culture in India.
- It will enable institutions and individuals to support arts and culture directly as partners with its government. **Hence, statement 2 is correct**
- It aims to mobilise extra resources through Public-Private Partnership (PPP) towards promoting, protecting & preserving India's Cultural Heritage.
- Composition:
- It is managed and administered by a Council and an Executive Committee to actualize those policies.
- The Council is chaired by the Union Minister of Culture **Hence, statement 3 is correct**

Ans. 7 Option A is correct

Explanation

- The Indian government is embarking on an Artificial Intelligence (AI) Mission to develop its own 'sovereign AI.'
- Objective: To enhance computational capacity in India and provide compute-as-a-service to Indian startups. **Hence, statement 1 is correct.**
- The government intends to build computational capacity through both government initiatives and public-private

partnerships. **Hence, statement 2 is incorrect.**

- The government also aims to create a digital public infrastructure (DPI) from the GPU assembly.
- This will allow startups to utilize computational capacity at a lower cost without investing in GPUs, a significant expense for AI operations. **Hence, statement 3 is correct.**
- In addition, the government also aims to make datasets available to Indian startups.

Ans. 8 Option A is correct

Explanation

- The Positive Indigenisation List consists of items that can only be procured by the Indian armed forces from domestic manufacturers, including those from the private sector or DPSUs. **Hence, statement 1 is correct.**
- This move is part of the government's efforts to reduce the reliance on imported arms and promote indigenous manufacturing of defense equipment.
- This concept was rolled out in the Defence Acquisition Procedure (DAP) 2020.
- The Global Innovation Index 2022 pegs India's research and development expenditure at just 0.7% of its GDP. **Hence, statement 2 is incorrect.**
- China, incidentally, spent \$421 billion in 2022, which is 2.54% of its GDP.
- It reveals India's lower R&D expenditure compared to China, emphasizing the importance of sustained momentum in policy-making and budgeting.

Ans. 9 Option B is correct

Explanation

- Demand-Side or Demand-Pull Inflation is a situation when aggregate demand for goods and services in the market exceeds the aggregate supply.
- When demand for goods and services are high and supply is not adequate, the firms increase the general price levels of goods and services.
- Causes of Demand Side Inflation

- Increased liquidity in the economy e.g. Increase in Government Expenditure
 - Increase in income levels and purchasing power of households.
 - Growth in population and increase in demand for goods and services.
 - Changing consumer behaviour.
- Hence, option B is correct.**

Ans. 10 Option B is correct

Explanation

- The recently concluded COP-28 focused on addressing the global climate crisis, covering various aspects.
- The Loss and Damage (L&D) fund, operationalized at COP-28, received only \$790 million in pledges.
- It witnessed the first Global Stocktake (GST), evaluating progress toward the goals of the Paris Agreement. **Hence, statement 1 is correct.**

- Countries pledged to transition away from fossil fuels and triple renewable energy capacity by 2030.
- The declaration also refers to 'transitional fuels', such as natural gas, for ensuring energy security, raising concerns about a true transition. **Hence, statement 2 is correct.**
- The financial segment of the GST implementation framework emphasized developed nations' responsibility in climate finance.
- India did not sign the UAE declaration on climate and health as it cites concerns about compromising healthcare infrastructure growth due to emissions reduction commitments.
- India did not join the Global Methane Pledge as it shifts focus from carbon dioxide to methane, a GHG with a lower lifetime. **Hence, statement 3 is incorrect.**

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